



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address COMMISSIONER OF PATENTS AND TRADEMARKS
703 East 1400
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/818,127

03/27/2001

Mike Blossfeld

TRW(TE)4704

8617

26294 7590 05/21/2003

TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P.
526 SUPERIOR AVENUE, SUITE 1111
CLEVEVLAND, OH 44114

EXAMINER

KLAUS, LISA NHUNG

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/818,127

Applicant(s)

BLOSSFELD ET AL. 

Examiner

Lisa N. Klaus

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(e). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 is/are allowed.
- 6) ☐ Claim(s) 1, 2 and 4-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s) _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: |

Art Unit: 2832

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5, 6 and 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Dowe (US 4,659,881).

Dowe discloses a switch assembly comprising:

- a depressible member 19 having an unactuated condition and an actuated condition;
- said depressible member being movable to actuated condition from said unactuated condition;
- first membrane 7 connected with said depressible member, said first membrane resisting movement of said depressible member from said unactuated condition to said actuated condition, said first membrane further providing an increasing return force urging said depressible member to said unactuated condition as an operator moves said depressible member from said unactuated condition to said condition; and
- a second membrane 9 resisting movement of said depressible member to said actuated condition, said second membrane further providing an increasing return force to said depressible member as the operator moves said depressible member to said actuated condition;
- said depressible member initially moving relative to said second membrane;

Art Unit: 2832

- said first membrane initially resisting movement of said depressible member without said second member without said second membrane resisting movement of said depressible member, and thereafter said first membrane resisting movement of said depressible member simultaneously with said second membrane;

- first membrane initially acting alone;

- wherein said first and second membranes are configured to have a concave surface facing away from said depressible member in said unactuated condition;

- wherein said second membrane is at least partially metal;

- said first membrane acting simultaneously with said second membrane;

- an electrical switch contact 45 adjacent said second membrane;

- said depressible member is spaced apart from said second membrane when said depressible member is in said unactuated condition;

- said second membrane is spaced apart from said depressible member while said first membrane is initially resisting movement of said depressible member;

- said first membrane is constructed integrally with said depressible member.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dowe in view of Chuang (US 6,166,662).

Art Unit: 2832

Dowe discloses the invention as claimed above except for a first membrane having a first end and a second end fixed to a lower surface of a depressible member and sliding along a planar surface.

Chuang discloses a key pad comprising:

- first membrane has a first end fixed to a lower surface of a depressible 111 and a second end, opposite said first end, sliding along a planar surface as said depressible member moves from said unactuated condition to said actuated condition;

- wherein said second end of said first membrane slides in a direction transverse to the direction of movement of said depressible member.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the first membrane as taught by Chuang with Dowe's switch for the purpose of pushing the push button back to the original position.

Allowable Subject Matter

5. Claim 3 is allowable.

Response to Arguments

6. Applicant's arguments filed 4-15-2003 have been fully considered but they are not persuasive.

Page 3, lines 1-4 and lines 25-28, applicant argues that "Dowe does not disclose the outer dome (7) and the inner dome (9) both reduce the return force simultaneously". This argument is not found to be persuasive because Dowe does disclose the outer dome (7) and the inner dome (9) both reduce the return force simultaneously (see col. 2, lines 60-68 and col. 3, lines 1-4).

Art Unit: 2832

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


8. Any inquiry concerning this communication should be directed to Lisa Nhung Klaus (formerly Nhung Nguyen) whose telephone number is (703)305-0422, and whose fax number is (703)308-7722. In the event that I am not reached, you can contact my supervisor, Mr. Elvin G. Enad at (703) 308-7619 or the tech center receptionist at (703)308-1782.

LK

Lisa Nhung Klaus

Patent Examiner - Art Unit 2832

May 11, 2003


ELVIN ENAD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800
5/14/03